.. THE ..

Montrose Nurseries

(Pty.) Ltd.

Catalog of citrus fruits.

LOCHABER, WHITE RIVER

TRANSVAAL

The Montrose Nurseries.

THE citrus grower in South Africa who plants citrus fruits at the present time can do so with the assurance that he need not make the serious mistakes that have been so common in the past. The citrus industry offers a bright future for those growers who plant good trees, of the right variety for the particular locality and who give them the best of treatment.

It is the aim of the Montrose Nurseries to supply the best trees possible. We use budwood carefully selected from parent trees of known high yield and quality. The root stocks (rough lemon) are ruthlessly culled in order that every weakling may be eliminated. We bud only those stocks which have proved to be vigorous and which have a perfectly formed root system. All others are destroyed.

A good tree is the first essential in establishing a profitable citrus grove and we use every care to ensure the propagation of the best trees only.

Varieties.

Valencia.—The Valencia Orange has been highly satisfactory in most areas of the Union and Rhodesia. It is a late variety, maturing from July to October, and under some conditions can be held on the trees until Christmas. The fruit is smaller in average size than the Navel, which is a distinct advantage, as the sizes from 176 to 252 realise better prices on the overseas markets than the larger sizes.

The Valencia bears heavily and the tree will stand unfavourable climatic conditions much better than the Navel.

The fruit is slightly oval or elongated, medium to small in size and attains a good colour when fully mature. It is practically seedless and many specimens are entirely so. It has an excellent flavour and a high juice content.

Mediterranean Sweet.—The Mediterranean Sweet

is a mid-season variety, maturing from June to August. The tree is smaller than that of the Valencia variety and the leaves are small and sharply pointed. The tree is exceptionally prolific and bears fruit of the highest quality. The fruit averages from 176 to 252, is thin-skinned, very sweet and markedly full of juice. It is practically seedless, containing no seeds or at most from five to six.

This mid-season variety is well worth planting, particularly in those areas where the Navel has been a failure. As the tree is not as large as the Valencia, a planting distance of 22 x 22 feet is adequate.

Lue Gim Gong.—The Lue Gim Gong is a late variety, ripening from July to November. It can be held on the tree for several months after reaching maturity and is supposed to retain its full colour instead of tending to revert to a green colour as may occur with the Valencia.

This variety is supposed to have originated in Florida as a result of the pollination of the Valencia with pollen from the Mediterranean Sweet by a Chinese horticulturist, Lue Gim Gong.

The fruit is somewhat oblong, very similar to the Valencia. It is of medium size, with a thin rind, and of a deep orange colour when fully mature. The juice is abundant, well coloured and richly flavoured. It contains from none to six seeds.

The Lue Gim Gong and the Valencia are the two best of the late varieties and both will be found to give every satisfaction if given suitable treatment.

Triumph Grapefruit.—The Triumph Grapefruit bears well and reaches normal quality in most areas of the country. It is not recommended for planting in the Eastern Cape Province. It has been satisfactory in many areas where the Marsh Grapefruit has been a failure.

The fruit is oblate, but not as flattened as that of the Marsh. The rind is yellow, pebbly, with large oil cells and is of medium thickness. The juice is abundant and of medium quality. The fruit contains from 30 to 60 seeds.

Washington Navel.—Under suitable environment and treatment the Washington Navel is of the highest quality and bears regularly and heavily. The fruit matures early in the season, from May to July. Under unsuitable conditions, however, this variety is a shy bearer and tends to produce much fruit that is too large for the export market. The Navel is particularly susceptible to attack by thrips and false codling moth. It is also more subject to decay in transit than any other variety. It is not recommended for GENERAL planting in the Transvaal or Rhodesia, although in a few localities it gives satisfaction.

In the Cape Province and Natal the Navel has proved to be one of the best varieties, bearing large crops of fruit of the highest quality. In such areas the planting of the Navel can be recommended.

Planting Distances.

Valencia	24 x 24 feet.
Lue Gim Gong	24 x 24 feet.
Mediterranean Sweet	22 x 22 feet.
Triumph Grapefruit	22 x 22 feet.

Suggestions on Planting.

For planting on fairly level land the square system is best. The trees are set in the corners of squares and cultivation can take place in two directions ; moreover, ample room is left for all field implements. For the laying out of small groves, five or ten acres in extent, the use of a wire about 100 yards long is the most simple. If the trees are to be set 24 feet apart, small buttons of solder are fixed to the wire at intervals of 24 feet. At each end of the wire is fastened a small iron ring which can be slipped over a stake. The wire should be stretched for several days before it is marked with the solder buttons. At the end of the planting wire, it is a good plan to attach a spring scale so that the wire can be stretched to the same tension for each row. A tension of about 100 lbs. is satisfactory.

The first step in laying out a grove is to determine

the longest base line. This should be thirty or forty feet inside the boundary in order that ample room may be left for cultivating implements. When the base line has been set, the marked wire is stretched along it and stakes are driven in the ground at each mark. If the base line is longer than the wire, the wire can be moved along as many times as may be required. The staking of the base line can be tested for straightness by sighting from one end to the other.

A line parallel to the base line should be laid out some distance from it. The distance should not be greater than the length of the wire used. The easiest way in which to lay out the side lines is to measure 80 feet along the base line from the first stake. Then measure 60 feet at right angles to the base line. Temporary stakes are put in at these points, and if the distance between them then is found to be 100 feet, the estimated angle will be a true right angle. This procedure is followed at each end of the base line and with the use of the marked planting wire a row of stakes is set along each side of the field at right angles to the base line. The planting wire can be stretched between corresponding stakes on opposite sides of the field and stakes driven in at each mark on the wire. If the lines set at right angles to the base line are determined carefully, the setting of the stakes which mark the position of each tree will be very accurate.

Planting of Trees.

Planting can be carried out practically at any time when the trees are semi-dormant and when irrigation water is available.

Before the holes are dug, the preparation of a planting board is necessary. A plank about six feet long, four or five inches wide and one inch thick is used and a V-notch is cut in the exact centre of the board. Notches are also made within six inches of each end of the board. The centre notch is then placed against the tree stakes put in when the ground is laid out. Small stakes are driven into the ground at the points where the two end notches are located. The board should be set in the direction of the flow of irrigation water,

otherwise when the furrows are made the two outside stakes may be disturbed. These end stakes must remain untouched until the trees are planted.

When the holes are dug to receive the trees it is necessary to remove the stakes marking the position of the trees, as they coincide with the centres of the holes. When each tree is set, the planting board is placed in position with the end stakes in the end notches and the centre notch then marks the original position of the tree stake. While the tree is being planted, it is held in this centre notch, and thus its exact position is secured.

The holes in which the trees are to be set should be at least two feet across and a foot and a half deep ; in stony soil the digging of larger holes is advisable. In digging the holes, the soil removed is placed on one side, in two piles, top soil in one and bottom soil in the other. One side of each tree row is left free from these piles so that the irrigation furrow may be made easily. The furrow should be made as near the holes as possible and when this is done and water is available, the trees can be delivered to the planting site. The holes should not be made too long before the planting is carried out as the sides become dry and cracked. Trees live and thrive IN SPITE of transplanting and before they are brought to the site everything should be in readiness for quick planting.

The greatest care should be taken to see that the roots of the nursery trees are not exposed to the air except when the trees are actually being set in the holes. Very little drying is needed to cause the death of the fibrous roots. Each tree, when it is removed from the barrel or other form of container, should have a wet sack wrapped around its roots while it is carried to the planting hole. Two men are necessary for the planting of each tree ; one holds the tree in the centre notch of the planting board, which has been placed in position, and spreads the roots, and the other man shovels soil around the roots. The tree should be placed in such a position that the bud union faces away from the strong afternoon sun.

A small cone of earth should be built up in the centre of the hole as this aids materially in spreading

the roots. Any injured roots should be cut off and any excessively long roots should be shortened to avoid any chance of root cramping

The weakest point of a tree is at the crown or bud-union. Numerous diseases of a serious nature attack the tree at the crown or bud-union. Susceptibility to disease is greatly accentuated by deep planting. Collar rot and dry root rot attack sweet orange wood more readily than rough lemon tissue and trees budded on rough lemon stocks should have the more susceptible wood as high above ground as possible. Citrus trees should be planted sufficiently high so as to have the crown roots showing above ground, regardless of the depth at which the trees stood in the nursery.

"When the tree is planted, sub-soil is placed in the bottom of the hole and the top soil is placed around the roots. The person holding the little tree spreads the roots into their natural position and firmly tamps the soil with his feet. Excessive firming of the soil results in root injury and should be avoided. As the soil will settle after irrigation, the trees should be set sufficiently high to allow for this settling, which will be from two to six inches, depending on the type of soil and the firmness of planting.

"As soon as the tree is set in position, a two or three foot basin of soil is thrown up around it, the soil for this being taken from outside the basin. An extra ring of soil need not be made around the trunk itself, as for the first year this is not necessary. By allowing water to reach every portion of the soil, air spaces are filled and all roots are watered thoroughly.

"In case of a limited water supply, the trees can be watered by the use of a tank waggon. When the water has settled around each tree, all exposed crown roots should be covered lightly with loose soil to protect them from the sun. Loose soil should be thrown into the basin to prevent baking of the wet soil when it dries out. A second irrigation should be given a day or two later, and in the absence of rain, thereafter at intervals of ten days to two weeks. On a heavy soil much less water is required than on a light soil.

"When the trees have been planted they should be

protected against the sun by whitewashing them or wrapping them with newspaper, burlap or thatching grass. Paper wrappings should be tied loosely to allow free circulation of air and all ties should be removed before they begin to cut into the trees. When white ants are present, the wrappings should be examined frequently.

"The newly planted trees should be inspected at short intervals from the time that the new shoots begin to grow and all eggs and larvae of the orange dog caterpillar should be destroyed. This should not be neglected as it does not take long for the larger larvae to denude the young trees of all new growth. At the same time it is necessary to rub off all young shoots that are not required for the building up of the tree.

"If adequate precautions and care are taken in the planting of the young trees, there should be no reason for disappointment." [1]

[1] ("The Culture of the Orange and Allied Fruits," H. Clark Powell, Central News Agency.)

ORDER FORM.

Every effort will be made to supply trees true to the particular variety, but in the event of any error occurring, the purchase price of the tree will be refunded or a new tree will be supplied, at the option of the purchaser. Beyond this, no liability is accepted.

All prices—f.o.r. White River.

Claims for damage in transit must be made against the railways.

Terms.—Cash, 30 days.

A charge of 5/- per hundred trees is made for packing. This charge will be refunded upon the return of the packing case in good order.

Number	Variety	1 to 100	101 to 1,000	over 1,000
		3/3	3/-	2/9
.....	Valencia Late.			
.....	Mediterranean Sweet.			
.....	Lue Gim Gong.			
.....	Triumph Grapefruit.			

Signature .....

Address .....

Desired date of despatch.....